

# **Arizona Electric EDI Standards**

**UDC Bill Data For ESP Consolidated Billing**

**VERSION: ANSI X12 810 Standard Ver/Rel 4010 DRAFT**

**Author:**  
**Modified:**

**Arizona Process Standards Work Group**  
**February 12, 2001 11:30AM**

**810****Invoice****Functional Group=IN**

This Draft Standard for Trial Use contains the format and establishes the data contents of the Invoice Transaction Set (810) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set can be used to provide for customary and established business and industry practice relative to the billing for goods and services provided.

**Notes:**

3/070 Number of line items (CTT01) is the accumulation of the number of IT1 segments. If used, hash total (CTT02) is the sum of the value of quantities invoiced (IT102) for each IT1 segment.

**General: Mandatory usage items inside detail and summary loops below imply that they are mandatory if the loop is present.**

**Heading:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	M	1			Mandatory
020	BIG	Beginning Segment for Invoice	M	1			Mandatory
030	NTE	Note/Special Instruction (customer or rate level messages)	O	100			Conditional
050	REF	Reference Identification (ESP assigned acct #)	O	12			Mandatory
050	REF	Reference Identification (UDC assigned acct #)	O	12			Mandatory

<b>LOOP ID - N1</b>			<b>200</b>				
070	N1	Name (UDC)	O	1			Mandatory
070	N1	Name (ESP)	O	1			Mandatory
130	ITD	Terms of Sale/Deferred Terms of Sale	O	>1			Mandatory
140	DTM	Date/Time Reference (Invoice period)	O	10			Mandatory

**Detail:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
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<b>LOOP ID - IT1 (METERED)</b>			<b>200000</b>				
010	IT1	Baseline Item Data (Metered)	O	1			Mandatory
040	TXI	Tax Information (Meter level taxes)	O	10			Conditional
059	MEA	Measurements (Multiplier)	O	40			Mandatory
059	MEA	Measurements (Kilowatt hours)	O	40			Mandatory
059	MEA	Measurements (Demand KW)	O	40			Conditional
060	PID	Product/Item Description	O	1			Conditional
120	REF	Reference Identification (Days in period)	O	>1			Optional
120	REF	Reference Identification (UNI/SDP)	O	>1			Mandatory
120	REF	Reference Identification (Meter number)	O	>1			Mandatory
120	REF	Reference Identification (Utility rate)	O	>1			Mandatory
120	REF	Reference Identification (Cycle Number)	O	>1			Optional
120	REF	Reference Identification (Estimation codes)	O	>1			Conditional
150	DTM	Date/Time Reference	O	10			Conditional

<b>LOOP ID - SLN</b>			<b>1000</b>				
200	SLN	Subline Item Detail	O	1			Mandatory
230	SAC	Service, Promotion, Allowance, or Charge Information (Meter level charges)	O	25			Mandatory

<b>LOOP ID - N1</b>						<b>200</b>
240	N1	Name (Customer)	O	1		Mandatory
260	N3	Address Information (Service address)	O	2		Mandatory
270	N4	Geographic Location	O	1		Optional
<b>LOOP ID - IT1 (UNMET)</b>						<b>200000</b>
010	IT1	Baseline Item Data (Invoice)	O	1		Mandatory
040	TXI	Tax Information (Unmetered level taxes)	O	10		Conditional
059	MEA	Measurements (Count of unmetered devices)	O	40		Mandatory
060	PID	Product/Item Description	O	1		Conditional
120	REF	Reference Identification (Days in period)	O	>1		Optional
120	REF	Reference Identification (Utility rate)	O	>1		Mandatory
120	REF	Reference Identification (Cycle Number)	O	>1		Optional
150	DTM	Date/Time Reference (Service period)	O	10		Conditional
<b>LOOP ID - SLN</b>						<b>1000</b>
200	SLN	Subline Item Detail	O	1		Mandatory
230	SAC	Service, Promotion, Allowance, or Charge Information	O	25		Mandatory
<b>LOOP ID - N1</b>						<b>200</b>
240	N1	Name (Customer)	O	1		Mandatory
260	N3	Address Information (Service address)	O	2		Mandatory
270	N4	Geographic Location	O	1		Optional
<b>LOOP ID - IT1 (ACCOUNT)</b>						<b>200000</b>
010	IT1	Baseline Item Data (Account)	O	1		Mandatory
040	TXI	Tax Information (Account level taxes)	O	10		Conditional
060	PID	Product/Item Description	O	1		Conditional
120	REF	Reference Identification (Days in period)	O	>1		Optional
120	REF	Reference Identification (Cycle Number)	O	>1		Optional
150	DTM	Date/Time Reference (Service period)	O	10		Conditional
<b>LOOP ID - SLN</b>						<b>1000</b>
200	SLN	Subline Item Detail	O	1		Mandatory
230	SAC	Service, Promotion, Allowance, or Charge Information (Meter level charges)	O	25		Mandatory
237	TXI	Tax Information (Account/item level taxes)	O	10		Conditional

**Summary:**

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	TDS	Total Monetary Value Summary	M	1			Mandatory
070	CTT	Transaction Totals	O	1		N3/070	Recommended
080	SE	Transaction Set Trailer	M	1			Mandatory

ST

Transaction Set Header

Pos: 010	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 2

To indicate the start of a transaction set and to assign a control number

Semantics:

- 1. The transaction set identifier (ST01) used by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the Invoice Transaction Set).

Notes:

Required

ST~810~0001

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
ST01	143	Transaction Set Identifier Code	M	ID	3/3	Mandatory				
Description: Code uniquely identifying a Transaction Set										
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>810</td><td>Invoice</td></tr></table>	<u>Code</u>	<u>Name</u>	810	Invoice				
<u>Code</u>	<u>Name</u>									
810	Invoice									
ST02	329	Transaction Set Control Number	M	AN	4/9	Mandatory				
Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set										



# BIG Beginning Segment for Invoice

Pos: 020	Max: 1
Heading - Mandatory	
Loop: N/A	Elements: 4

To indicate the beginning of an invoice transaction set and transmit identifying numbers and dates

**Semantics:**

- 1. BIG01 is the invoice issue date.
- 2. BIG03 is the date assigned by the purchaser to purchase order.
- 3. BIG10 indicates the consolidated invoice number. When BIG07 contains code CI, BIG10 is not used.

**Comments:**

- 1. BIG07 is used only to further define the type of invoice when needed.

**Notes:**  
*Required*  
  
BIG~19990201~19990201123500001~PR~00

**Element Summary:**

Ref	Id	Element Name	Req	Type	Min/Max	Usage										
BIG01	373	Date Description: Date expressed as CCYYMMDD Notes: Document creation date	M	DT	8/8	Mandatory										
BIG02	76	Invoice Number Description: Identifying number assigned by issuer Notes: Unique document identifier by sender, such as invoice number.	M	AN	1/22	Mandatory										
BIG07	640	Transaction Type Code Description: Code specifying the type of transaction <table><tr><th>Code</th><th>Name</th></tr><tr><td>FB</td><td>Final Bill</td></tr><tr><td colspan="2">Notes: Final bill ready items from the non-billing party.</td></tr><tr><td>PR</td><td>Product (or Service)</td></tr><tr><td colspan="2">Notes: Regular service period bill items from the non-billing party.</td></tr></table>	Code	Name	FB	Final Bill	Notes: Final bill ready items from the non-billing party.		PR	Product (or Service)	Notes: Regular service period bill items from the non-billing party.		O	ID	2/2	Mandatory
Code	Name															
FB	Final Bill															
Notes: Final bill ready items from the non-billing party.																
PR	Product (or Service)															
Notes: Regular service period bill items from the non-billing party.																
BIG08	353	Transaction Set Purpose Code Description: Code identifying purpose of transaction set <table><tr><th>Code</th><th>Name</th></tr><tr><td>00</td><td>Original</td></tr><tr><td>CO</td><td>Corrected</td></tr><tr><td colspan="2">Notes: Used to send rebill items from non-billing party.</td></tr></table>	Code	Name	00	Original	CO	Corrected	Notes: Used to send rebill items from non-billing party.		O	ID	2/2	Mandatory		
Code	Name															
00	Original															
CO	Corrected															
Notes: Used to send rebill items from non-billing party.																

**NTE****Note/Special Instruction (Customer or rate level messages)**

<b>Pos:</b> 030	<b>Max:</b> 100
<b>Heading:</b> N/A	<b>Optional</b>
<b>Loop:</b> N/A	<b>Elements:</b> 2

To transmit information in a free-form format, if necessary, for comment or special instruction

**Comments:**

- The NTE segment permits free-form information/data which, under ANSI X12 standard implementations, is not machine processable. The use of the NTE segment should therefore be avoided, if at all possible, in an automated environment.

**Notes:***Conditional.*

*Used to explain or clarify billing charges from non-billing party. Recommend using non EDI method to deliver repetitive messages.*

*NTE~ADD~ADJUSTMENTS DUE TO POWER FACTOR CHANGE*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
NTE01	363	<b>Note Reference Code</b>	<b>O</b>	<b>ID</b>	<b>3/3</b>	<b>Mandatory</b>
		<b>Description:</b> Code identifying the functional area or purpose for which the note applies				
		<u>Code</u>		<u>Name</u>		
		ADD		Additional Information		
		<b>Notes:</b> <i>Non-billing party messages. These are for special bill messages, and exclude repetitive and/or regulatory messages.</i>				
NTE02	352	<b>Description</b>	<b>M</b>	<b>AN</b>	<b>1/80</b>	<b>Mandatory</b>
		<b>Description:</b> A free-form description to clarify the related data elements and their content				
		<b>Notes:</b> <i>Message text</i>				

**REF****Reference Identification (ESP assigned customer account number)**

Pos: 050	Max: 12
Heading - Optional	
Loop: N/A	Elements: 2

To specify identifying information

**Syntax:**

R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**

1. REF04 contains data relating to the value cited in REF02.

**Notes:***Required**REF~11~935668322***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory

**Description:** Code qualifying the Reference Identification**Notes:** *Energy Service Provider assigned account number for the end customer*

<u>Code</u>	<u>Name</u>
11	Account Number

REF02	127	Reference Identification	C	AN	1/30	Mandatory
<b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier						
<b>Notes:</b> <i>Account number</i>						

REF

Reference Identification (UDC assigned customer account number)

Pos: 050	Max: 12
Heading - Optional	
Loop: N/A	Elements: 2

To specify identifying information

Syntax:

R0203 -- At least one of REF02 or REF03 is required.

Semantics:

- 1. REF04 contains data relating to the value cited in REF02.

Notes:  
Required  
REF~12~123456789

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	<b>Reference Identification Qualifier</b> <b>Description:</b> Code qualifying the Reference Identification <b>Notes:</b> <i>Utility(UDC) assigned account number for the end customer</i>	M	ID	2/3	Mandatory				
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>12</td><td>Billing Account</td></tr></table>	<u>Code</u>	<u>Name</u>	12	Billing Account				
<u>Code</u>	<u>Name</u>									
12	Billing Account									
REF02	127	<b>Reference Identification</b> <b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <b>Notes:</b> <i>Account number</i>	C	AN	1/30	Mandatory				

**N1****Name (UDC identification)**

<b>Pos: 070</b>	<b>Max: 1</b>
<b>Heading - Optional</b>	
<b>Loop: N1</b>	<b>Elements: 5</b>

To identify a party by type of organization, name, and code

**Syntax:**

R0203 -- At least one of N102 or N103 is required.

P0304 -- If either N103 or N104 are present, then the others are required.

**Comments:**

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

**Notes:**

*Required*

*N1~8S~UTILITY COMPANY~1~123456789~41*

**Element Summary:**

Ref	Id	Element Name	Req	Type	Min/Max	Usage						
N101	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	M	ID	2/3	Mandatory						
		<table><tr><th>Code</th><th>Name</th></tr><tr><td>8S</td><td>Consumer Service Provider (CSP)</td></tr></table> Notes: Utility	Code	Name	8S	Consumer Service Provider (CSP)						
Code	Name											
8S	Consumer Service Provider (CSP)											
N102	93	Name Description: Free-form name Notes: Entity name	C	AN	1/60	Conditional						
N103	66	Identification Code Qualifier Description: Code designating the system/method of code structure used for Identification Code (67)	C	ID	1/2	Conditional						
		<table><tr><th>Code</th><th>Name</th></tr><tr><td>1</td><td>D-U-N-S Number, Dun &amp; Bradstreet</td></tr><tr><td>9</td><td>D-U-N-S+4, D-U-N-S Number with Four Character Suffix</td></tr></table>	Code	Name	1	D-U-N-S Number, Dun & Bradstreet	9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix				
Code	Name											
1	D-U-N-S Number, Dun & Bradstreet											
9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix											
N104	67	Identification Code Description: Code identifying a party or other code	C	AN	2/80	Conditional						
N106	98	Entity Identifier Code Description: Code identifying an organizational entity, a physical location, property or an individual	O	ID	2/3	Mandatory						
		<table><tr><th>Code</th><th>Name</th></tr><tr><td>41</td><td>Submitter</td></tr></table>	Code	Name	41	Submitter						
Code	Name											
41	Submitter											

**N1****Name (ESP identification)**

<b>Pos:</b> 070	<b>Max:</b> 1
<b>Heading - Optional</b>	
<b>Loop:</b> N1	<b>Elements:</b> 5

To identify a party by type of organization, name, and code

**Syntax:**

R0203 -- At least one of N102 or N103 is required.

P0304 -- If either N103 or N104 are present, then the others are required.

**Comments:**

1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
2. N105 and N106 further define the type of entity in N101.

**Notes:****Required**

*N1~SJ~ENERGY SERVICE PROVIDER~1~123456789~40*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>						
N101	98	<b>Entity Identifier Code</b> <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>SJ</td><td>Service Provider</td></tr></table> <b>Notes:</b> <i>Energy Service Provider</i>	<u>Code</u>	<u>Name</u>	SJ	Service Provider	M	ID	2/3	Mandatory		
<u>Code</u>	<u>Name</u>											
SJ	Service Provider											
N102	93	<b>Name</b> <b>Description:</b> Free-form name <b>Notes:</b> <i>Entity name</i>	C	AN	1/60	Conditional						
N103	66	<b>Identification Code Qualifier</b> <b>Description:</b> Code designating the system/method of code structure used for Identification Code (67) <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>1</td><td>D-U-N-S Number, Dun &amp; Bradstreet</td></tr><tr><td>9</td><td>D-U-N-S+4, D-U-N-S Number with Four Character Suffix</td></tr></table>	<u>Code</u>	<u>Name</u>	1	D-U-N-S Number, Dun & Bradstreet	9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix	C	ID	1/2	Conditional
<u>Code</u>	<u>Name</u>											
1	D-U-N-S Number, Dun & Bradstreet											
9	D-U-N-S+4, D-U-N-S Number with Four Character Suffix											
N104	67	<b>Identification Code</b> <b>Description:</b> Code identifying a party or other code	C	AN	2/80	Conditional						
N106	98	<b>Entity Identifier Code</b> <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>40</td><td>Receiver</td></tr></table>	<u>Code</u>	<u>Name</u>	40	Receiver	O	ID	2/3	Mandatory		
<u>Code</u>	<u>Name</u>											
40	Receiver											

**ITD**

## Terms of Sale/Deferred Terms of Sale (Payment due date)

Pos: 130	Max: >1
Heading - Optional	
Loop: N/A	Elements: 1

To specify terms of sale

### Syntax:

1. ITD03 L03040513 -- If ITD03 is present, then at least one of ITD04, ITD05 or ITD13 is required.
2. ITD08 L08040513 -- If ITD08 is present, then at least one of ITD04, ITD05 or ITD13 is required.
3. ITD09 L091011 -- If ITD09 is present, then at least one of ITD10 or ITD11 is required.

### Semantics:

1. ITD15 is the percentage applied to a base amount used to determine a late payment charge.

### Comments:

1. If the code in ITD01 is "04", then ITD07 or ITD09 is required and either ITD10 or ITD11 is required; if the code in ITD01 is "05", then ITD06 or ITD07 is required.

### Notes:

*Required*

ITD-----20000601

### Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
ITD06	446	Terms Net Due Date	O	DT	8/8	Mandatory
<b>Description:</b> Date when total invoice amount becomes due expressed in format CCYYMMDD						
<b>Notes:</b> <i>Payment due date</i>						

# DTM Date/Time Reference (Billing period)

Pos: 140	Max: 10
Heading - Optional	
Loop: N/A	Elements: 2

To specify pertinent dates and times

## Syntax:

R020305 -- At least one of DTM02, DTM03 or DTM05 is required.

C0403 -- If DTM04 is present, then DTM03 is required

P0506 -- If either DTM05 or DTM06 are present, then the others are required.

## Notes:

*Required, reflects current billing period only*

DTM~186~20000315

DTM~187~20000414

## Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
DTM01	374	Date/Time Qualifier	M	ID	3/3	Mandatory
<b>Description:</b> Code specifying type of date or time, or both date and time						
		<u>Code</u>		<u>Name</u>		
		186		Invoice Period Start		
		187		Invoice Period End		
DTM02	373	Date	C	DT	8/8	Mandatory
<b>Description:</b> Date expressed as CCYYMMDD						



**IT1****Baseline Item Data (Metered)**

<b>Pos: 010</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: IT1</b>	<b>Elements: 5</b>

To specify the basic and most frequently used line item data for the invoice and related transactions

**Syntax:**

P020304 -- If either IT102, IT103 or IT104 are present, then the others are required.  
P0607 -- If either IT106 or IT107 are present, then the others are required.  
P0809 -- If either IT108 or IT109 are present, then the others are required.  
P1011 -- If either IT110 or IT111 are present, then the others are required.  
P1213 -- If either IT112 or IT113 are present, then the others are required.  
P1415 -- If either IT114 or IT115 are present, then the others are required.  
P1617 -- If either IT116 or IT117 are present, then the others are required.  
P1819 -- If either IT118 or IT119 are present, then the others are required.  
P2021 -- If either IT120 or IT121 are present, then the others are required.  
P2223 -- If either IT122 or IT123 are present, then the others are required.  
P2425 -- If either IT124 or IT125 are present, then the others are required.

**Semantics:**

- IT101 is the purchase order line item identification.

**Comments:**

- Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
- IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

**Notes:***Required**IT1~1~SV~EL~C3~METER***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
IT101	350	<b>Assigned Identification</b> <b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set <b>Notes:</b> <i>Line item counter within IT1 loop</i>	O	AN	1/20	Recommended				
IT106	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>SV</td><td>Service Rendered</td></tr></table>	<u>Code</u>	<u>Name</u>	SV	Service Rendered	C	ID	2/2	Mandatory
<u>Code</u>	<u>Name</u>									
SV	Service Rendered									
IT107	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service <b>Notes:</b> <i>Commodity</i> <i>EL Electric Service</i>	C	AN	1/48	Mandatory				
IT108	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number	C	ID	2/2	Mandatory				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		used in Product/Service ID (234)				
		<u>Code</u> C3				
		<u>Name</u> Classification				
IT109	234	Product/Service ID	C	AN	1/48	Mandatory
		Description: Identifying number for a product or service				
		Notes: Line item billing levels				
		METER for meter level charges				

**TXI****Tax Information (Meter level taxes)**

<b>Pos: 040</b>	<b>Max: 10</b>
<b>Detail - Optional</b>	
<b>Loop: IT1</b>	<b>Elements: 6</b>

To specify tax information

**Syntax:**

R020306 -- At least one of TXI02, TXI03 or TXI06 is required.

P0405 -- If either TXI04 or TXI05 are present, then the others are required.

C0803 -- If TXI08 is present, then TXI03 is required

**Semantics:**

1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

**Notes:***Required if taxes exist and are billed at IT1 levels(Meter)**TXI~ZZ~4.55~CD~ABC~A~5**TXI~LS~8.10***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																
TXI01	963	<b>Tax Type Code</b> Description: Code specifying the type of tax	M	ID	2/2	Mandatory																
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>AT</td><td>Assessment for Regulatory Assessments</td></tr><tr><td>CP</td><td>County/Parish Sales Tax</td></tr><tr><td>CS</td><td>City Sales Tax</td></tr><tr><td>FR</td><td>Franchise Tax</td></tr><tr><td>LS</td><td>State and Local Sales Tax</td></tr><tr><td>ST</td><td>State Sales Tax</td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>	<u>Code</u>	<u>Name</u>	AT	Assessment for Regulatory Assessments	CP	County/Parish Sales Tax	CS	City Sales Tax	FR	Franchise Tax	LS	State and Local Sales Tax	ST	State Sales Tax	ZZ	Mutually Defined				
<u>Code</u>	<u>Name</u>																					
AT	Assessment for Regulatory Assessments																					
CP	County/Parish Sales Tax																					
CS	City Sales Tax																					
FR	Franchise Tax																					
LS	State and Local Sales Tax																					
ST	State Sales Tax																					
ZZ	Mutually Defined																					
TXI02	782	<b>Monetary Amount</b> Description: Monetary amount	C	R	1/18	Mandatory																
TXI04	955	<b>Tax Jurisdiction Code Qualifier</b> Description: Code identifying the source of the data used in tax jurisdiction code <b>Notes:</b> Required if TXI01 = ZZ	C	ID	2/2	Conditional																
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>CD</td><td>Customer defined</td></tr></table>	<u>Code</u>	<u>Name</u>	CD	Customer defined																
<u>Code</u>	<u>Name</u>																					
CD	Customer defined																					
TXI05	956	<b>Tax Jurisdiction Code</b> Description: Code identifying the taxing jurisdiction <b>Notes:</b> Required if TXI01= ZZ	C	AN	1/10	Conditional																
TXI07	662	<b>Relationship Code</b> Description: Code indicating the relationship between entities	O	ID	1/1	Optional																
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>A</td><td>Add</td></tr></table> <b>Notes:</b> The amount in TXI02 is included when summing the invoice total	<u>Code</u>	<u>Name</u>	A	Add																
<u>Code</u>	<u>Name</u>																					
A	Add																					

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
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# MEA Measurements (Multiplier)

Pos: 059	Max: 40
Detail - Optional	
Loop: IT1	Elements: 6

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

**Syntax:**

- R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.
- C0504 -- If MEA05 is present, then MEA04 is required
- C0604 -- If MEA06 is present, then MEA04 is required
- L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
- E0803 -- Only one of MEA08 or MEA03 may be present.

**Semantics:**

- 1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

**Comments:**

- 1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

**Notes:**  
*Required for metered account. If no multiplier exists, use value of 1 in MEA03*  
*MEA~MU~1*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
MEA02	738	Measurement Qualifier	O	ID	1/3	Mandatory				
		Description: Code identifying a specific product or process characteristic to which a measurement applies								
		Notes: Required when representing multiplier value								
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>MU</td><td>Multiplier</td></tr></table>	<u>Code</u>	<u>Name</u>	MU	Multiplier				
<u>Code</u>	<u>Name</u>									
MU	Multiplier									
MEA03	739	Measurement Value	C	R	1/20	Mandatory				
		Description: The value of the measurement								
		Notes: If no multiplier exists, use value of 1 in MEA03								

# MEA Measurements (Reads)

Pos: 059	Max: 40
Detail - Optional	
Loop: IT1	Elements: 6

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

## Syntax:

R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.

C0504 -- If MEA05 is present, then MEA04 is required

C0604 -- If MEA06 is present, then MEA04 is required

L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.

E0803 -- Only one of MEA08 or MEA03 may be present.

## Semantics:

- MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

## Comments:

- When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

## Notes:

*Required for metered account*

*MEA~AA~3111~KH~62666~65777*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage																					
MEA01	737	<b>Measurement Reference ID Code</b> <b>Description:</b> Code identifying the broad category to which a measurement applies <b>Notes:</b> <i>Required to designate actual or estimated read</i>	O	ID	2/2	Mandatory																					
		<table><thead><tr><th></th><th><u>Name</u></th><th><u>Code</u></th></tr></thead><tbody><tr><td></td><td>AA</td><td>Meter reading-beginning actual/ending actual</td></tr><tr><td></td><td>EE</td><td>Meter reading-beginning estimated/ending estimated</td></tr><tr><td></td><td>AE</td><td>Meter reading-beginning actual/ending estimated</td></tr><tr><td></td><td>EA</td><td>Meter reading-beginning estimated/ending actual</td></tr><tr><td></td><td>AN</td><td>Period Actual</td></tr><tr><td></td><td>EN</td><td>Period Estimated</td></tr></tbody></table>		<u>Name</u>	<u>Code</u>		AA	Meter reading-beginning actual/ending actual		EE	Meter reading-beginning estimated/ending estimated		AE	Meter reading-beginning actual/ending estimated		EA	Meter reading-beginning estimated/ending actual		AN	Period Actual		EN	Period Estimated				
	<u>Name</u>	<u>Code</u>																									
	AA	Meter reading-beginning actual/ending actual																									
	EE	Meter reading-beginning estimated/ending estimated																									
	AE	Meter reading-beginning actual/ending estimated																									
	EA	Meter reading-beginning estimated/ending actual																									
	AN	Period Actual																									
	EN	Period Estimated																									
MEA03	739	<b>Measurement Value</b> <b>Description:</b> The value of the measurement <b>Notes:</b> <i>Billable consumption with multiplier applied</i>	C	R	1/20	Mandatory																					
MEA04	C001	<b>Composite Unit of Measure</b> <b>Description:</b> To identify a composite unit of measure(See Figures Appendix for examples of use)	C	Comp		Mandatory																					
	355	<b>Unit or Basis for Measurement Code</b> <b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Mandatory																					
		<b>Code</b>																									

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Name</u>				
		KH Kilowatt Hour				
		K3 Kilovolt Amperes Reactive Hours (KVARH)				
MEA05	740	<b>Range Minimum</b>	C	R	1/20	Mandatory
		<b>Description:</b> The value specifying the minimum of the measurement range				
		<b>Notes:</b> <i>Beginning read</i>				
MEA06	741	<b>Range Maximum</b>	C	R	1/20	Mandatory
		<b>Description:</b> The value specifying the maximum of the measurement range				
		<b>Notes:</b> <i>Ending read</i>				
MEA07	935	<b>Measurement Significance Code</b>	C	ID	2/2	Conditional
		<u>Code</u> <u>NAME</u>				
		41 Off Peak				
		42 On Peak				
		45 Summer On Peak				
		49 Winter On Peak				
		57 Summer				
		58 Winter				
		66 Shoulder				
		73 Summer Off Peak				
		75 Winter Off Peak				
		For time of use (TOU) customers				

# MEA Measurements (Demand)

Pos: 059	Max: 40
Detail - Optional	
Loop: IT1	Elements: 6

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

## Syntax:

R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.  
 C0504 -- If MEA05 is present, then MEA04 is required  
 C0604 -- If MEA06 is present, then MEA04 is required  
 L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.  
 E0803 -- Only one of MEA08 or MEA03 may be present.

## Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

## Comments:

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

## Notes:

*Conditional. Required for metered accounts where demand is measured*

*MEA~AA~125.44~K1~50~41*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA01	737	Measurement Reference ID Code <b>Description:</b> Code identifying the broad category to which a measurement applies <b>Notes:</b> <i>Required to designate actual or estimated</i>	O	ID	2/2	Mandatory
		<b>Code</b>				
		<b>Name</b>				
		AN Period Actual				
		EN Period Estimated				
MEA03	739	Measurement Value <b>Description:</b> The value of the measurement <b>Notes:</b> <i>Billable demand with multiplier applied</i>	C	R	1/20	Mandatory
MEA04	C001	Composite Unit of Measure <b>Description:</b> To identify a composite unit of measure(See Figures Appendix for examples of use)	C	Comp		Mandatory
	355	Unit or Basis for Measurement Code <b>Description:</b> Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Mandatory
		<b>Code</b>				
		<b>Name</b>				
		K1 Kilowatt Demand				



<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																				
MEA06	741	<b>Range Maximum</b> <b>Description:</b> The value specifying the maximum of the measurement range <b>Notes:</b> <i>Required when representing kilowatt demand read without multiplier applied</i>	C	R	1/20	Mandatory																				
MEA07	935	<b>Measurement Significance Code</b> <table><tr><th><u>Code</u></th><th><u>NAME</u></th></tr><tr><td>41</td><td>Off Peak</td></tr><tr><td>42</td><td>On Peak</td></tr><tr><td>45</td><td>Summer On Peak</td></tr><tr><td>49</td><td>Winter On Peak</td></tr><tr><td>57</td><td>Summer</td></tr><tr><td>58</td><td>Winter</td></tr><tr><td>66</td><td>Shoulder</td></tr><tr><td>73</td><td>Summer Off Peak</td></tr><tr><td>75</td><td>Winter Off Peak</td></tr></table>	<u>Code</u>	<u>NAME</u>	41	Off Peak	42	On Peak	45	Summer On Peak	49	Winter On Peak	57	Summer	58	Winter	66	Shoulder	73	Summer Off Peak	75	Winter Off Peak	C	ID	2/2	Conditional
<u>Code</u>	<u>NAME</u>																									
41	Off Peak																									
42	On Peak																									
45	Summer On Peak																									
49	Winter On Peak																									
57	Summer																									
58	Winter																									
66	Shoulder																									
73	Summer Off Peak																									
75	Winter Off Peak																									

For time of use (TOU) customers

PID

Product/Item Description (Designate corrected vs. original)

Pos: 060	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

To describe a product or process in coded or free-form format

Syntax:

- 1. PID04 C0403 -- If PID04 is present, then PID03 is required
- 2. PID04 R0405 -- At least one of PID04 or PID05 is required.
- 3. PID07 C0703 -- If PID07 is present, then PID03 is required
- 4. PID08 C0804 -- If PID08 is present, then PID04 is required
- 5. PID09 C0905 -- If PID09 is present, then PID05 is required

Semantics:

- 1. Use PID03 to indicate the organization that publishes the code list being referred to.
- 2. PID04 should be used for industry-specific product description codes.
- 3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
- 4. PID09 is used to identify the language being used in PID05.

Comments:

- 1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
- 2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
- 3. PID07 specifies the individual code list of the agency specified in PID03.

Notes:

Conditional. Required for cancel/rebill to differentiate between corrected and original details.

PID~F~CORRECTED

PID~F~ORIGINAL

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	Item Description Type	M	ID	1/1	Mandatory
		<div><div>Code</div><div>Name</div></div>				
		FFree-form				
PID05	352	Description	C	AN	1/80	Mandatory

REF

Reference Identification (Days in period)

Pos: 120

Max: >1

Detail - Optional

Loop: IT1

Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Optional, and is generally used in cancel/rebill situations*  
*REF~ZZ~31*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory				
Description: Code qualifying the Reference Identification										
<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>							<u>Code</u>	<u>Name</u>	ZZ	Mutually Defined
<u>Code</u>	<u>Name</u>									
ZZ	Mutually Defined									
Notes: Number of days in the usage period										
REF03	352	Description	C	AN	1/80	Mandatory				
Description: A free-form description to clarify the related data elements and their content										
Notes: Number of days in period										

**REF****Reference Identification (UNI)**

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**

R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**

1. REF04 contains data relating to the value cited in REF02.

**Notes:***Required**REF~LU~ABC123***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	<b>Reference Identification Qualifier</b>	M	ID	2/3	Mandatory

**Description:** Code qualifying the Reference IdentificationCodeName

LU

Location Number

**Notes:** *Represents Universal Node Identifier UNI*

REF03	352	<b>Description</b>	C	AN	1/80	Mandatory
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**Description:** A free-form description to clarify the related data elements and their content**Notes:** UNI

REF

Reference Identification (Meter number)

Pos: 120

Max: >1

Detail - Optional

Loop: IT1

Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Required for metered account*  
*REF~MG~ABC123*

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage				
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory				
		Description: Code qualifying the Reference Identification								
		<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>MG</td><td>Meter Number</td></tr></table>	<u>Code</u>	<u>Name</u>	MG	Meter Number				
<u>Code</u>	<u>Name</u>									
MG	Meter Number									
		Notes: Required for metered accounts								
REF03	352	Description	C	AN	1/80	Mandatory				
		Description: A free-form description to clarify the related data elements and their content								
		Notes: Meter number or UMI depending on service territory								

**REF****Reference Identification (Utility rate)**

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**

R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**

1. REF04 contains data relating to the value cited in REF02.

**Notes:***Required**REF~NH~~E36***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory

**Description:** Code qualifying the Reference IdentificationCode

NH

Name

Rate Card Number

**Notes:** *Utility rate class*

REF03	352	Description	C	AN	1/80	Mandatory
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**Description:** A free-form description to clarify the related data elements and their content**Notes:** *Rate*

REF

Reference Identification (Cycle Number)

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Optional*  
*REF~TZ~15*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Mandatory				
<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>TZ</td><td>Total Cycle Number</td></tr></table> <div>Notes: Meter cycle.</div>							<u>Code</u>	<u>Name</u>	TZ	Total Cycle Number
<u>Code</u>	<u>Name</u>									
TZ	Total Cycle Number									
REF03	352	Description Description: A free-form description to clarify the related data elements and their content Notes: Cycle number when the meter will be read	C	AN	1/80	Mandatory				

REF

Reference Identification (Estimation Reason codes)

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

Syntax:

- 1. REF02 R0203 -- At least one of REF02 or REF03 is required.

Semantics:

- 1. REF04 contains data relating to the value cited in REF02.

Notes:

- 1. This segment is required when the MEA01 = AA, EE, AE, EA, AN, or EN.

**Notes:**  
*Conditional, required if meter read is estimated*  
*REF~ESN~EA1*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																										
REF01	128	<b>Reference Identification Qualifier</b> <b>Description:</b> Code qualifying the Reference Identification - Estimate Reason Code	M	ID	2/3	Mandatory																										
<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>ESN</td><td>Estimate Sequence Number</td></tr></table>							<u>Code</u>	<u>Name</u>	ESN	Estimate Sequence Number																						
<u>Code</u>	<u>Name</u>																															
ESN	Estimate Sequence Number																															
REF02	127	<b>Reference Identification</b> <b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier	C	AN	1/30	Mandatory																										
<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>EA1</td><td>Extreme Weather - Flood</td></tr><tr><td>EA2</td><td>Extreme Weather - Snow</td></tr><tr><td>EA3</td><td>Extreme Weather - Storm</td></tr><tr><td>EA4</td><td>Extreme Weather</td></tr><tr><td>EA5</td><td>Labor Disagreement</td></tr><tr><td>EA6</td><td>Emergency</td></tr><tr><td>EB0</td><td>Self read not received from customer</td></tr><tr><td>EC1</td><td>No Access - Bad Animal</td></tr><tr><td>EC2</td><td>No Access - Gate Locked</td></tr><tr><td>EC3</td><td>No Access - Trim Foliage</td></tr><tr><td>EC4</td><td>No Access - No Answer at Premises</td></tr><tr><td>EC5</td><td>No Access - Meter Blocked</td></tr></table>							<u>Code</u>	<u>Name</u>	EA1	Extreme Weather - Flood	EA2	Extreme Weather - Snow	EA3	Extreme Weather - Storm	EA4	Extreme Weather	EA5	Labor Disagreement	EA6	Emergency	EB0	Self read not received from customer	EC1	No Access - Bad Animal	EC2	No Access - Gate Locked	EC3	No Access - Trim Foliage	EC4	No Access - No Answer at Premises	EC5	No Access - Meter Blocked
<u>Code</u>	<u>Name</u>																															
EA1	Extreme Weather - Flood																															
EA2	Extreme Weather - Snow																															
EA3	Extreme Weather - Storm																															
EA4	Extreme Weather																															
EA5	Labor Disagreement																															
EA6	Emergency																															
EB0	Self read not received from customer																															
EC1	No Access - Bad Animal																															
EC2	No Access - Gate Locked																															
EC3	No Access - Trim Foliage																															
EC4	No Access - No Answer at Premises																															
EC5	No Access - Meter Blocked																															



<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		EC6 = No Access - Irrigation				
		EC7 = No Access - Business Not Open				
		EC8 = No Access				
		ED1 = Customer Meter Equipment Failure				
		ED2 = Customer Meter Removed				
		ED3 = Customer Meter Changed				
		ED4 = Customer Dirty Meter Glass				
		EE0 = Read Not Received From Meter Reading Agent				
		EE1 = Other				
		EV1 = Meter Was Misread				
		EV2 = Zero Consumption - Check Failure				
		EV3 = High/Low Check Failure				
		EV4 = Meter in Test (Interval Estimate Only)				
		EV5 = Demand Not Reset				
		EV6 = Energy Diversion - Read Estimated				
		GE01 = MRSP Estimated				
		GE02 = UDC Estimated				
		GE03 = Automated Estimation				
		GE04 = Calculated Read				
		MA1 = Power Failure in Interval				
		MA2 = Meter Tamper				
		MS1 = Dead Meter				
		MS2 = Kit Faulted Service				
		MS3 = Kit Source Service				
		MS4 = Flatted in UDC				
		MS5 = Exposed Wiring				
		MS6 = Low Service Wire				
		MS7 = Meter Destroyed				
		MS8 = Broken Glass				
		MS9 = Service Wires in Trees				
		MS10 = Curled Dial				
		MS11 = Demand Won't Reset to Zero				
		MS12 = Wrong Meter Number				
		MS13 = Wrong Address				
		MS14 = Battery Failure				
		MS15 = Pot Light				
		MD1 = Wrong Color Seal				
		MD2 = Inverted Meter				
		MD3 = Meter Not Sealed				
		MD4 = Ring Damaged				
		MD5 = Jumpers Bypassed				
		MD6 = Diversion				
		MD7 = No Panel Seal				
		MD8 = Hole in Cover				

02/12/01

Invoice - 810						
<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		MD9 = Disc Jammed				
		MD10 = Stolen Meter Installed				
		GT = Go to REF03 for Description				
REF03	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content. <b>Notes:</b> <i>Required if REF02 = GT</i>	C	AN	1/80	Conditional

DTM

Date/Time Reference (period start/stop dates)

Pos: 150	Max: 10
Detail - Optional	
Loop: IT1	Elements: 2

To specify pertinent dates and times

Syntax:

- R020305 -- At least one of DTM02, DTM03 or DTM05 is required.
- C0403 -- If DTM04 is present, then DTM03 is required
- P0506 -- If either DTM05 or DTM06 are present, then the others are required.

Notes:

Conditional. Used when period is different than the header, such as in cancel/rebill and requires sending prior period(s) detail

DTM~150~20000615

DTM~151~20000714

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage						
DTM01	374	Date/Time Qualifier	M	ID	3/3	Mandatory						
Description: Code specifying type of date or time, or both date and time												
		<table><tr><th>Code</th><th>Name</th></tr><tr><td>150</td><td>Service Period Start</td></tr><tr><td>151</td><td>Service Period End</td></tr></table>	Code	Name	150	Service Period Start	151	Service Period End				
Code	Name											
150	Service Period Start											
151	Service Period End											
DTM02	373	Date	C	DT	8/8	Mandatory						
Description: Date expressed as CCYYMMDD												

# SLN Subline Item Detail

Pos: 200	Max: 1
Detail - Optional	
Loop: SLN	Elements: 2

To specify product subline detail item data

## Syntax:

1. SLN04 P0405 -- If either SLN04 or SLN05 are present, then the others are required.
2. SLN07 C0706 -- If SLN07 is present, then SLN06 is required
3. SLN08 C0806 -- If SLN08 is present, then SLN06 is required
4. SLN09 P0910 -- If either SLN09 or SLN10 are present, then the others are required.
5. SLN11 P1112 -- If either SLN11 or SLN12 are present, then the others are required.
6. SLN13 P1314 -- If either SLN13 or SLN14 are present, then the others are required.
7. SLN15 P1516 -- If either SLN15 or SLN16 are present, then the others are required.
8. SLN17 P1718 -- If either SLN17 or SLN18 are present, then the others are required.
9. SLN19 P1920 -- If either SLN19 or SLN20 are present, then the others are required.
10. SLN21 P2122 -- If either SLN21 or SLN22 are present, then the others are required.
11. SLN23 P2324 -- If either SLN23 or SLN24 are present, then the others are required.
12. SLN25 P2526 -- If either SLN25 or SLN26 are present, then the others are required.
13. SLN27 P2728 -- If either SLN27 or SLN28 are present, then the others are required.

## Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

## Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

## Notes:

*Required if there are charges at a meter level*

*SLN~1~A*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN01	350	Assigned Identification	M	AN	1/20	Mandatory
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
		<b>Notes:</b> <i>May be used as a loop counter for line item charges</i>				
SLN03	662	Relationship Code	M	ID	1/1	Mandatory
		<b>Description:</b> Code indicating the relationship between entities				
		<u>Code</u>		<u>Name</u>		
		A		Add		

**SAC****Service, Promotion, Allowance, or Charge Information (Charge type and amount)**

Pos: 230	Max: 25
Detail - Optional	
Loop: SLN	Elements: 5

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

**Syntax:**

1. SAC02 R0203 -- At least one of SAC02 or SAC03 is required.
2. SAC03 P0304 -- If either SAC03 or SAC04 are present, then the others are required.
3. SAC06 P0607 -- If either SAC06 or SAC07 are present, then the others are required.
4. SAC09 P0910 -- If either SAC09 or SAC10 are present, then the others are required.
5. SAC11 C1110 -- If SAC11 is present, then SAC10 is required
6. SAC13 L130204 -- If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. SAC14 C1413 -- If SAC14 is present, then SAC13 is required
8. SAC16 C1615 -- If SAC16 is present, then SAC15 is required

**Semantics:**

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

**Comments:**

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

**Notes:**

*Required if there are charges at a meter level*

*SAC~C~EU~BAS001~1250~BASIC SVC CHG*

**Element Summary:**

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SAC01	248	Allowance or Charge Indicator Description: Code which indicates an allowance or charge for the service specified	M	ID	1/1	Mandatory
		<u>Code</u> C				
		<u>Name</u> Charge				
SAC03	559	Agency Qualifier Code Description: Code identifying the agency assigning the code values	C	ID	2/2	Mandatory
		<u>Code</u>				
		<u>Name</u>				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		EU Electric Utilities				
SAC04	1301	Agency Service, Promotion, Allowance, or Charge Code	C	AN	1/10	Mandatory
		<b>Description:</b> Agency maintained code identifying the service, promotion, allowance, or charge				
		<b>Notes:</b> Required. Valid codes from UIG billing codes for SAC04 are below. Additional description is placed in SAC15				
		DIS001 Distribution Charge				
		DSC012 Primary Voltage Credit				
		DSC001 Voltage Credit				
		MSC022 Competitive Transition Charge				
		MSC024 System Benefit Charge				
		ADJ002 Adjustment				
		MSC026 Interruptible Penalty				
		SMD016 Meter Read				
		SMD019 Meter Read Verify				
		DSC013 Transmission Voltage Credit				
		SER008 TOU Remote Metering				
		SMD000 No Access Charge				
		SMD015 Meter Ownership				
		SMD014 Meter Services				
		TRN000 Required Ancillary				
		GEN000 Fixed Must Run				
		PFA001 Power Factor				
		CRE004 Transformer Discount				
		DSC000 Primary Metering Discount				
		DMD000 First step kW				
		DMD000 Remaining kW				
		DMD007 On Peak kW Charge				
		DMD029 Shoulder kW Charge				
		DMD006 Off Peak kW Charge				
		ENC039 On Peak kWh Charge				
		ENC000 Shoulder kWh Charge				
		ENC003 Off Peak kWh Charge				
		ADJ000 Cancelled Bill				
		ADJ008 Miscellaneous Billing Adjustment				
		SER000 Interval Data Request Charge				
		ADJ000 Refund				
		SER000 Charge for Consumption Data				
		MSC007 Charge for Damaged Equipment				
		MSC000 Charges for Unauthorized Use of Service				
		HOC000 After Hour Establishment Fee				
		HOC000 Cancel Service Establishment Fee				
		HOC001 Service Establishment Fee				
		CRE000 Guarantee Home Refund				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		MSC000 Meter Test Charge				
		RCS001 Reconnect Fee				
		TEM001 Temporary Service Charge				
		CRE000 Residential Rate 70 Refund				
		TRS001 Charges Transferred				
		FFR000 Xray Charge				
		FAC000 Three Phase				
		BAS001 Basic Service Charge				
		FUE003 Fuel Adjustment				
		RCS000 Cancellation of Reconnect Fee				
		MSC000 Totalizer Charge				
		SUR001 ACC Regulatory Assessment				
		SUR000 Environmental Portfolio Surcharge				
		SUR000 RUCO Regulatory Assessment				
		MSC000 Flat rate Charge				
		DSC009 Energy Assistance Discount				
		SUR000 RTO Charge				
SAC05	610	Amount Description: Monetary amount Notes: Dollar amounts may be positive or negative.	O	N2	1/15	Mandatory
SAC15	352	Description Description: A free-form description to clarify the related data elements and their content Notes: Description is required when SAC04 code is one of the following, or the suffix of the SAC04 code is 000.	C	AN	1/80	Conditional

N1

Name (Customer)

Pos: 240	Max: 1
Detail - Optional	
Loop: N1	Elements: 2

To identify a party by type of organization, name, and code

Syntax:

- 1. N102 R0203 -- At least one of N102 or N103 is required.
- 2. N103 P0304 -- If either N103 or N104 are present, then the others are required.

Comments:

- 1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
- 2. N105 and N106 further define the type of entity in N101.

Notes:  
Required  
N1~MQ~JOHN DOE

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>						
N101	98	Entity Identifier Code <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual <b>Notes:</b> <i>Required.</i>	M	ID	2/3	Mandatory						
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>MQ</td><td>Metering Location</td></tr><tr><td colspan="2"><b>Notes:</b> <i>Customer representing service address</i></td></tr></table>	<u>Code</u>	<u>Name</u>	MQ	Metering Location	<b>Notes:</b> <i>Customer representing service address</i>					
<u>Code</u>	<u>Name</u>											
MQ	Metering Location											
<b>Notes:</b> <i>Customer representing service address</i>												
N102	93	Name <b>Description:</b> Free-form name <b>Notes:</b> <i>Customer name</i>	C	AN	1/60	Mandatory						



N3

Address Information (Service address)

Pos: 260	Max: 2
Detail - Optional	
Loop: N1	Elements: 1

To specify the location of the named party

**Notes:**  
*Required*  
  
N3~77 SUNSET STRIP

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	M	AN	1/55	Mandatory
		Description: Address information				
		Notes: Service address				

**N4****Geographic Location (Service city/state)**

<b>Pos: 270</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: N1</b>	<b>Elements: 2</b>

To specify the geographic place of the named party

**Syntax:**

C0605 -- If N406 is present, then N405 is required

**Comments:**

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

**Notes:**

*Optional.*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name <b>Description:</b> Free-form text for city name <b>Notes:</b> <i>Required if address is within city/town</i>	O	AN	2/30	Conditional
N402	156	State or Province Code <b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency <b>Notes:</b> <i>Always AZ</i>	O	ID	2/2	Mandatory
N403	116	Postal Code <b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O	ID	3/15	Optional

**IT1****Baseline Item Data (Unmetered)**

<b>Pos:</b> 010	<b>Max:</b> 1
<b>Detail:</b> Optional	
<b>Loop:</b> IT1	<b>Elements:</b> 5

To specify the basic and most frequently used line item data for the invoice and related transactions

**Syntax:**

P020304 -- If either IT102, IT103 or IT104 are present, then the others are required.  
P0607 -- If either IT106 or IT107 are present, then the others are required.  
P0809 -- If either IT108 or IT109 are present, then the others are required.  
P1011 -- If either IT110 or IT111 are present, then the others are required.  
P1213 -- If either IT112 or IT113 are present, then the others are required.  
P1415 -- If either IT114 or IT115 are present, then the others are required.  
P1617 -- If either IT116 or IT117 are present, then the others are required.  
P1819 -- If either IT118 or IT119 are present, then the others are required.  
P2021 -- If either IT120 or IT121 are present, then the others are required.  
P2223 -- If either IT122 or IT123 are present, then the others are required.  
P2425 -- If either IT124 or IT125 are present, then the others are required.

**Semantics:**

- IT101 is the purchase order line item identification.

**Comments:**

- Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
- IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

**Notes:***Required**IT1~2~SV~EL~C3~UNMET***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
IT101	350	<b>Assigned Identification</b> <b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set <b>Notes:</b> <i>Line item counter within IT1 loop</i>	O	AN	1/20	Recommended				
IT106	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>SV</td><td>Service Rendered</td></tr></table>	<u>Code</u>	<u>Name</u>	SV	Service Rendered	C	ID	2/2	Mandatory
<u>Code</u>	<u>Name</u>									
SV	Service Rendered									
IT107	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service <b>Notes:</b> <i>Commodity</i> <i>EL Electric Service</i>	C	AN	1/48	Mandatory				
IT108	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number	C	ID	2/2	Mandatory				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		used in Product/Service ID (234)				
		<u>Code</u> C3				
		<u>Name</u> Classification				
IT109	234	Product/Service ID	C	AN	1/48	Mandatory
		Description: Identifying number for a product or service				
		Notes: Line item billing levels				
		UNMET for charges at unmetered accounts				

**TXI****Tax Information (Billing level taxes)**

<b>Pos: 040</b>	<b>Max: 10</b>
<b>Detail - Optional</b>	
<b>Loop: IT1</b>	<b>Elements: 6</b>

To specify tax information

**Syntax:**

- R020306 -- At least one of TXI02, TXI03 or TXI06 is required.  
 P0405 -- If either TXI04 or TXI05 are present, then the others are required.  
 C0803 -- If TXI08 is present, then TXI03 is required

**Semantics:**

1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

**Notes:**

*Required if taxes exist and are billed at IT1 levels(Unmetered)*

TXI~ZZ~4.55~CD~ABC~A~5  
 TXI~LS~8.10

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																
TXI01	963	<b>Tax Type Code</b> Description: Code specifying the type of tax <table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>AT</td><td>Assessment for Regulatory Assessments</td></tr><tr><td>CP</td><td>County/Parish Sales Tax</td></tr><tr><td>CS</td><td>City Sales Tax</td></tr><tr><td>FR</td><td>FranchiseTax</td></tr><tr><td>LS</td><td>State and Local Sales Tax</td></tr><tr><td>ST</td><td>State Sales Tax</td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>	<u>Code</u>	<u>Name</u>	AT	Assessment for Regulatory Assessments	CP	County/Parish Sales Tax	CS	City Sales Tax	FR	FranchiseTax	LS	State and Local Sales Tax	ST	State Sales Tax	ZZ	Mutually Defined	M	ID	2/2	Mandatory
<u>Code</u>	<u>Name</u>																					
AT	Assessment for Regulatory Assessments																					
CP	County/Parish Sales Tax																					
CS	City Sales Tax																					
FR	FranchiseTax																					
LS	State and Local Sales Tax																					
ST	State Sales Tax																					
ZZ	Mutually Defined																					
TXI02	782	<b>Monetary Amount</b> Description: Monetary amount	C	R	1/18	Mandatory																
TXI04	955	<b>Tax Jurisdiction Code Qualifier</b> Description: Code identifying the source of the data used in tax jurisdiction code <b>Notes:</b> Required if TXI01 = ZZ <table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>CD</td><td>Customer defined</td></tr></table>	<u>Code</u>	<u>Name</u>	CD	Customer defined	C	ID	2/2	Conditional												
<u>Code</u>	<u>Name</u>																					
CD	Customer defined																					
TXI05	956	<b>Tax Jurisdiction Code</b> Description: Code identifying the taxing jurisdiction <b>Notes:</b> Required if TXI01= ZZ	C	AN	1/10	Conditional																
TXI07	662	<b>Relationship Code</b> Description: Code indicating the relationship between entities	O	ID	1/1	Optional																

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>		<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Code</u>	<u>Name</u>				
		A	Add				

**Notes:** *The amount in TX102 is included when summing the invoice total*

MEA

Measurements (Count of unmetered devices)

Pos: 059Max: 40

Detail - Optional

Loop: IT1Elements: 6

To specify physical measurements or counts, including dimensions, tolerances, variances, and weights(See Figures Appendix for example of use of C001)

Syntax:

- R03050608 -- At least one of MEA03, MEA05, MEA06 or MEA08 is required.
- C0504 -- If MEA05 is present, then MEA04 is required
- C0604 -- If MEA06 is present, then MEA04 is required
- L07030506 -- If MEA07 is present, then at least one of MEA03, MEA05 or MEA06 is required.
- E0803 -- Only one of MEA08 or MEA03 may be present.

Semantics:

1. MEA04 defines the unit of measure for MEA03, MEA05, and MEA06.

Comments:

1. When citing dimensional tolerances, any measurement requiring a sign (+ or -), or any measurement where a positive (+) value cannot be assumed, use MEA05 as the negative (-) value and MEA06 as the positive (+) value.

Notes:

Required for count of unmetered devices

MEA~I~EA

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
MEA03	739	Measurement Value Description: The value of the measurement Notes: Count of unmetered devices	C	R	1/20	Mandatory
MEA04	C001	Composite Unit of Measure Description: To identify a composite unit of measure(See Figures Appendix for examples of use)	C	Comp		Mandatory
	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken	M	ID	2/2	Mandatory
		<div>CodeName</div> <div>EAEach</div>				

PID

Product/Item Description (Designate corrected vs. original)

Pos: 060	Max: 1
Detail - Optional	
Loop: PID	Elements: 2

To describe a product or process in coded or free-form format

Syntax:

- 1. PID04 C0403 -- If PID04 is present, then PID03 is required
- 2. PID04 R0405 -- At least one of PID04 or PID05 is required.
- 3. PID07 C0703 -- If PID07 is present, then PID03 is required
- 4. PID08 C0804 -- If PID08 is present, then PID04 is required
- 5. PID09 C0905 -- If PID09 is present, then PID05 is required

Semantics:

- 1. Use PID03 to indicate the organization that publishes the code list being referred to.
- 2. PID04 should be used for industry-specific product description codes.
- 3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
- 4. PID09 is used to identify the language being used in PID05.

Comments:

- 1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
- 2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
- 3. PID07 specifies the individual code list of the agency specified in PID03.

**Notes:**

*Conditional. Required for cancel/rebill to differentiate between corrected and original details.*

PID~F~CORRECTED

PID~F~ORIGINAL

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
PID01	349	Item Description Type	M	ID	1/1	Mandatory
		Code Name				
		F Free-form				
PID05	352	Description	C	AN	1/80	Mandatory



REF

Reference Identification (Days in period)

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Optional, and is generally used in cancel/rebill situations*  
*REF~ZZ~31*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Mandatory				
		<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table> <b>Notes:</b> <i>Number of days in the usage period</i>	<u>Code</u>	<u>Name</u>	ZZ	Mutually Defined				
<u>Code</u>	<u>Name</u>									
ZZ	Mutually Defined									
REF03	352	Description Description: A free-form description to clarify the related data elements and their content <b>Notes:</b> <i>Number of days in period</i>	C	AN	1/80	Mandatory				

**REF****Reference Identification (Utility rate)**

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**

R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**

1. REF04 contains data relating to the value cited in REF02.

**Notes:**

*Required*  
*REF~NH~E36*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
REF01	128	Reference Identification Qualifier	M	ID	2/3	Mandatory

**Description:** Code qualifying the Reference Identification

<u>Code</u>	<u>Name</u>
NH	Rate Card Number

**Notes:** *Utility rate class*

REF03	352	Description	C	AN	1/80	Mandatory
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**Description:** A free-form description to clarify the related data elements and their content**Notes:** *Rate*

REF

Reference Identification (Cycle Number)

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Optional*  
*REF~TZ~15*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Mandatory				
		<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>TZ</td><td>Total Cycle Number</td></tr></table>	<u>Code</u>	<u>Name</u>	TZ	Total Cycle Number				
<u>Code</u>	<u>Name</u>									
TZ	Total Cycle Number									
		Notes: <i>Meter cycle.</i>								
REF03	352	Description Description: A free-form description to clarify the related data elements and their content	C	AN	1/80	Mandatory				
		Notes: <i>Cycle number when the meter will be read</i>								

DTM

Date/Time Reference (period start/stop dates)

Pos: 150	Max: 10
Detail - Optional	
Loop: IT1	Elements: 2

To specify pertinent dates and times

Syntax:

- R020305 -- At least one of DTM02, DTM03 or DTM05 is required.
- C0403 -- If DTM04 is present, then DTM03 is required
- P0506 -- If either DTM05 or DTM06 are present, then the others are required.

**Notes:**  
*Conditional. Used when period is different than the header, such as cancel/rebill and requires sending prior period(s) detail*  
*DTM~150~20000615*  
*DTM~151~20000714*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>						
DTM01	374	Date/Time Qualifier	M	ID	3/3	Mandatory						
Description: Code specifying type of date or time, or both date and time												
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>150</td><td>Service Period Start</td></tr><tr><td>151</td><td>Service Period End</td></tr></table>	<u>Code</u>	<u>Name</u>	150	Service Period Start	151	Service Period End				
<u>Code</u>	<u>Name</u>											
150	Service Period Start											
151	Service Period End											
DTM02	373	Date	C	DT	8/8	Mandatory						
Description: Date expressed as CCYYMMDD												

# SLN Subline Item Detail

Pos: 200	Max: 1
Detail - Optional	
Loop: SLN	Elements: 2

To specify product subline detail item data

## Syntax:

1. SLN04 P0405 -- If either SLN04 or SLN05 are present, then the others are required.
2. SLN07 C0706 -- If SLN07 is present, then SLN06 is required
3. SLN08 C0806 -- If SLN08 is present, then SLN06 is required
4. SLN09 P0910 -- If either SLN09 or SLN10 are present, then the others are required.
5. SLN11 P1112 -- If either SLN11 or SLN12 are present, then the others are required.
6. SLN13 P1314 -- If either SLN13 or SLN14 are present, then the others are required.
7. SLN15 P1516 -- If either SLN15 or SLN16 are present, then the others are required.
8. SLN17 P1718 -- If either SLN17 or SLN18 are present, then the others are required.
9. SLN19 P1920 -- If either SLN19 or SLN20 are present, then the others are required.
10. SLN21 P2122 -- If either SLN21 or SLN22 are present, then the others are required.
11. SLN23 P2324 -- If either SLN23 or SLN24 are present, then the others are required.
12. SLN25 P2526 -- If either SLN25 or SLN26 are present, then the others are required.
13. SLN27 P2728 -- If either SLN27 or SLN28 are present, then the others are required.

## Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

## Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

## Notes:

*Required if there are charges at a detailed level*

*SLN~I~A*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage				
SLN01	350	Assigned Identification	M	AN	1/20	Mandatory				
<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set										
<b>Notes:</b> <i>May be used as a loop counter for line item charges</i>										
SLN03	662	Relationship Code	M	ID	1/1	Mandatory				
<b>Description:</b> Code indicating the relationship between entities										
<table><tr><th>Code</th><th>Name</th></tr><tr><td>A</td><td>Add</td></tr></table>							Code	Name	A	Add
Code	Name									
A	Add									

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
<b>SAC</b>		<b>Service, Promotion, Allowance, or Charge Information (Charge type and amount)</b>				
						Pos: 230                      Max: 25 Detail - Optional Loop: SLN                  Elements: 5

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

**Syntax:**

1. SAC02 R0203 -- At least one of SAC02 or SAC03 is required.
2. SAC03 P0304 -- If either SAC03 or SAC04 are present, then the others are required.
3. SAC06 P0607 -- If either SAC06 or SAC07 are present, then the others are required.
4. SAC09 P0910 -- If either SAC09 or SAC10 are present, then the others are required.
5. SAC11 C1110 -- If SAC11 is present, then SAC10 is required
6. SAC13 L130204 -- If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. SAC14 C1413 -- If SAC14 is present, then SAC13 is required
8. SAC16 C1615 -- If SAC16 is present, then SAC15 is required

**Semantics:**

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

**Comments:**

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

**Notes:**

*Required if there are charges at a detailed level*

*SAC~C~EU~DIS001~1250~~~~~DISTRIBUTION DELIVERY*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator Description: Code which indicates an allowance or charge for the service specified	M	ID	1/1	Mandatory
		<u>Code</u> <u>Name</u> C                      Charge				
SAC03	559	Agency Qualifier Code Description: Code identifying the agency assigning the code values	C	ID	2/2	Mandatory

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<div> <div><u>Code</u></div> <div>EU</div> </div> <div> <div><u>Name</u></div> <div>Electric Utilities</div> </div>				
SAC04	1301	<b>Agency Service, Promotion, Allowance, or Charge Code</b> <b>Description:</b> Agency maintained code identifying the service, promotion, allowance, or charge  <b>Notes:</b> Required. Valid codes from UIG billing codes for SAC04 are below. Additional description is placed in SAC15 DIS001 Distribution Charge ADJ002 Adjustment MSC000 Flat Rate Charge FFR001 Non Metered Service TRN000 Required Ancillary GEN000 Fixed Must Run BAS001 Basic Service Charge ADJ000 Cancelled Bill ADJ008 Miscellaneous Billing Adjustment ADJ000 Contract Adjustment ADJ000 Refund SER000 Charge for Consumption Data MSC007 Charge for Damaged Equipment HOC000 Cancel Service Establishment Fee HOC001 Service Establishment Fee TRS001 Charges Transferred FFR000 Xray Charge SUR000 RUCO Regulatory Assessment SUR000 ACC Regulatory Assessment SUR000 Environmental Portfolio Surcharge FUE003 Fuel Adjustment MSC024 System Benefit Charge	C	AN	1/10	Mandatory
SAC05	610	<b>Amount</b> <b>Description:</b> Monetary amount  <b>Notes:</b> Dollar amounts may be positive or negative.	O	N2	1/15	Mandatory
SAC15	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content  <b>Notes:</b> Description is required when SAC04 code is one of the following, or the suffix of the SAC04 code is 000:	C	AN	1/80	Conditional

N1

Name (Customer)

Pos: 240	Max: 1
Detail - Optional	
Loop: N1	Elements: 2

To identify a party by type of organization, name, and code

Syntax:

- 1. N102 R0203 -- At least one of N102 or N103 is required.
- 2. N103 P0304 -- If either N103 or N104 are present, then the others are required.

Comments:

- 1. This segment, used alone, provides the most efficient method of providing organizational identification. To obtain this efficiency the "ID Code" (N104) must provide a key to the table maintained by the transaction processing party.
- 2. N105 and N106 further define the type of entity in N101.

**Notes:**  
*Required*  
*N1~MQ~JOHN DOE*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>						
N101	98	Entity Identifier Code <b>Description:</b> Code identifying an organizational entity, a physical location, property or an individual <b>Notes:</b> <i>Required.</i>	M	ID	2/3	Mandatory						
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>MQ</td><td>Metering Location</td></tr><tr><td colspan="2"><b>Notes:</b> <i>Customer representing service address</i></td></tr></table>	<u>Code</u>	<u>Name</u>	MQ	Metering Location	<b>Notes:</b> <i>Customer representing service address</i>					
<u>Code</u>	<u>Name</u>											
MQ	Metering Location											
<b>Notes:</b> <i>Customer representing service address</i>												
N102	93	Name <b>Description:</b> Free-form name <b>Notes:</b> <i>Customer name</i>	C	AN	1/60	Mandatory						



N3

Address Information (Service address)

Pos: 260	Max: 2
Detail - Optional	
Loop: N1	Elements: 1

To specify the location of the named party

**Notes:**  
*Required*  
N3~77 SUNSET STRIP

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N301	166	Address Information	M	AN	1/55	Mandatory
		Description: Address information				
		Notes: Service address				

**N4****Geographic Location (Service city/state)**

<b>Pos:</b> 270	<b>Max:</b> 1
<b>Detail - Optional</b>	
<b>Loop:</b> N1	<b>Elements:</b> 2

To specify the geographic place of the named party

**Syntax:**

C0605 -- If N406 is present, then N405 is required

**Comments:**

1. A combination of either N401 through N404, or N405 and N406 may be adequate to specify a location.
2. N402 is required only if city name (N401) is in the U.S. or Canada.

**Notes:**

*Optional*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
N401	19	City Name <b>Description:</b> Free-form text for city name <b>Notes:</b> <i>Required if address is within city/town</i>	O	AN	2/30	Conditional
N402	156	State or Province Code <b>Description:</b> Code (Standard State/Province) as defined by appropriate government agency <b>Notes:</b> <i>Always AZ</i>	O	ID	2/2	Mandatory
N403	116	Postal Code <b>Description:</b> Code defining international postal zone code excluding punctuation and blanks (zip code for United States)	O	ID	3/15	Optional

**IT1****Baseline Item Data (Account)**

<b>Pos: 010</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: IT1</b>	<b>Elements: 5</b>

To specify the basic and most frequently used line item data for the invoice and related transactions

**Syntax:**

P020304 -- If either IT102, IT103 or IT104 are present, then the others are required.  
P0607 -- If either IT106 or IT107 are present, then the others are required.  
P0809 -- If either IT108 or IT109 are present, then the others are required.  
P1011 -- If either IT110 or IT111 are present, then the others are required.  
P1213 -- If either IT112 or IT113 are present, then the others are required.  
P1415 -- If either IT114 or IT115 are present, then the others are required.  
P1617 -- If either IT116 or IT117 are present, then the others are required.  
P1819 -- If either IT118 or IT119 are present, then the others are required.  
P2021 -- If either IT120 or IT121 are present, then the others are required.  
P2223 -- If either IT122 or IT123 are present, then the others are required.  
P2425 -- If either IT124 or IT125 are present, then the others are required.

**Semantics:**

- IT101 is the purchase order line item identification.

**Comments:**

- Element 235/234 combinations should be interpreted to include products and/or services. See the Data Dictionary for a complete list of IDs.
- IT106 through IT125 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

**Notes:***Required**IT1~2~SV~EL~C3~ACCOUNT***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
IT101	350	<b>Assigned Identification</b> <b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set <b>Notes:</b> <i>Line item counter within IT1 loop</i>	O	AN	1/20	Recommended				
IT106	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number used in Product/Service ID (234) <table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>SV</td><td>Service Rendered</td></tr></table>	<u>Code</u>	<u>Name</u>	SV	Service Rendered	C	ID	2/2	Mandatory
<u>Code</u>	<u>Name</u>									
SV	Service Rendered									
IT107	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service <b>Notes:</b> <i>Commodity</i> <i>EL Electric Service</i>	C	AN	1/48	Mandatory				
IT108	235	<b>Product/Service ID Qualifier</b> <b>Description:</b> Code identifying the type/source of the descriptive number	C	ID	2/2	Mandatory				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
		used in Product/Service ID (234)								
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>C3</td><td>Classification</td></tr></table>	<u>Code</u>	<u>Name</u>	C3	Classification				
<u>Code</u>	<u>Name</u>									
C3	Classification									
IT109	234	<b>Product/Service ID</b> <b>Description:</b> Identifying number for a product or service <b>Notes:</b> <i>Line item billing levels</i> <i>ACCOUNT for account level charges</i>	C	AN	1/48	Mandatory				

TXI

Tax Information (Billing level taxes)

Pos: 040	Max: 10
Detail - Optional	
Loop: IT1	Elements: 6

To specify tax information

Syntax:

- R020306 -- At least one of TXI02, TXI03 or TXI06 is required.
- P0405 -- If either TXI04 or TXI05 are present, then the others are required.
- C0803 -- If TXI08 is present, then TXI03 is required

Semantics:

- 1. TXI02 is the monetary amount of the tax.
- 2. TXI03 is the tax percent expressed as a decimal.
- 3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

**Notes:**  
*Required if taxes exist and are billed at IT1 levels(Account)*

TXI~ZZ~4.55~CD~ABC~A~5  
TXI~LS~8.10

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage																
TXI01	963	<b>Tax Type Code</b> Description: Code specifying the type of tax <table><tr><th>Code</th><th>Name</th></tr><tr><td>AT</td><td>Assessment for Regulatory Assessments</td></tr><tr><td>CP</td><td>County/Parish Sales Tax</td></tr><tr><td>CS</td><td>City Sales Tax</td></tr><tr><td>FR</td><td>FranchiseTax</td></tr><tr><td>LS</td><td>State and Local Sales Tax</td></tr><tr><td>ST</td><td>State Sales Tax</td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>	Code	Name	AT	Assessment for Regulatory Assessments	CP	County/Parish Sales Tax	CS	City Sales Tax	FR	FranchiseTax	LS	State and Local Sales Tax	ST	State Sales Tax	ZZ	Mutually Defined	M	ID	2/2	Mandatory
Code	Name																					
AT	Assessment for Regulatory Assessments																					
CP	County/Parish Sales Tax																					
CS	City Sales Tax																					
FR	FranchiseTax																					
LS	State and Local Sales Tax																					
ST	State Sales Tax																					
ZZ	Mutually Defined																					
TXI02	782	<b>Monetary Amount</b> Description: Monetary amount	C	R	1/18	Mandatory																
TXI04	955	<b>Tax Jurisdiction Code Qualifier</b> Description: Code identifying the source of the data used in tax jurisdiction code <b>Notes:</b> Required if TXI01 = ZZ <table><tr><th>Code</th><th>Name</th></tr><tr><td>CD</td><td>Customer defined</td></tr></table>	Code	Name	CD	Customer defined	C	ID	2/2	Conditional												
Code	Name																					
CD	Customer defined																					
TXI05	956	<b>Tax Jurisdiction Code</b> Description: Code identifying the taxing jurisdiction <b>Notes:</b> Required if TXI01= ZZ	C	AN	1/10	Conditional																
TXI07	662	<b>Relationship Code</b> Description: Code indicating the relationship between entities	O	ID	1/1	Optional																

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>		<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Code</u>	<u>Name</u>				
		A	Add				

**Notes:** *The amount in TX102 is included when summing the invoice total*

**PID****Product/Item Description (Designate corrected vs. original)**

<b>Pos: 060</b>	<b>Max: 1</b>
<b>Detail - Optional</b>	
<b>Loop: PID</b>	<b>Elements: 2</b>

To describe a product or process in coded or free-form format

**Syntax:**

1. PID04 C0403 -- If PID04 is present, then PID03 is required
2. PID04 R0405 -- At least one of PID04 or PID05 is required.
3. PID07 C0703 -- If PID07 is present, then PID03 is required
4. PID08 C0804 -- If PID08 is present, then PID04 is required
5. PID09 C0905 -- If PID09 is present, then PID05 is required

**Semantics:**

1. Use PID03 to indicate the organization that publishes the code list being referred to.
2. PID04 should be used for industry-specific product description codes.
3. PID08 describes the physical characteristics of the product identified in PID04. A "Y" indicates that the specified attribute applies to this item; an "N" indicates it does not apply. Any other value is indeterminate.
4. PID09 is used to identify the language being used in PID05.

**Comments:**

1. If PID01 equals "F", then PID05 is used. If PID01 equals "S", then PID04 is used. If PID01 equals "X", then both PID04 and PID05 are used.
2. Use PID06 when necessary to refer to the product surface or layer being described in the segment.
3. PID07 specifies the individual code list of the agency specified in PID03.

**Notes:**

*Conditional. Required for cancel/rebill to differentiate between corrected and original details.*

PID~F~~~~CORRECTED  
PID~F~~~~ORIGINAL

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
PID01	349	Item Description Type	M	ID	1/1	Mandatory
		<u>Code</u> <u>Name</u>				
		F Free-form				
PID05	352	Description	C	AN	1/80	Mandatory

REF

Reference Identification (Days in period)

Pos: 120

Max: >1

Detail - Optional

Loop: IT1

Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Optional*  
*REF~ZZ~31*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Mandatory				
<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table> <b>Notes:</b> <i>Number of days in the usage period</i>							<u>Code</u>	<u>Name</u>	ZZ	Mutually Defined
<u>Code</u>	<u>Name</u>									
ZZ	Mutually Defined									
REF03	352	Description Description: A free-form description to clarify the related data elements and their content <b>Notes:</b> <i>Number of days in period</i>	C	AN	1/80	Mandatory				



REF

Reference Identification (Cycle Number)

Pos: 120	Max: >1
Detail - Optional	
Loop: IT1	Elements: 3

To specify identifying information

**Syntax:**  
R0203 -- At least one of REF02 or REF03 is required.

**Semantics:**  
1. REF04 contains data relating to the value cited in REF02.

**Notes:**  
*Optional*  
*REF~TZ~~15*

Element Summary:

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>				
REF01	128	Reference Identification Qualifier Description: Code qualifying the Reference Identification	M	ID	2/3	Mandatory				
<table><tr><td><u>Code</u></td><td><u>Name</u></td></tr><tr><td>TZ</td><td>Total Cycle Number</td></tr></table> <b>Notes:</b> <i>Meter cycle.</i>							<u>Code</u>	<u>Name</u>	TZ	Total Cycle Number
<u>Code</u>	<u>Name</u>									
TZ	Total Cycle Number									
REF03	352	Description Description: A free-form description to clarify the related data elements and their content <b>Notes:</b> Cycle number when the meter will be read	C	AN	1/80	Mandatory				

DTM

Date/Time Reference (period start/stop dates)

Pos: 150	Max: 10
Detail - Optional	
Loop: IT1	Elements: 2

To specify pertinent dates and times

Syntax:

- R020305 -- At least one of DTM02, DTM03 or DTM05 is required.
- C0403 -- If DTM04 is present, then DTM03 is required
- P0506 -- If either DTM05 or DTM06 are present, then the others are required.

Notes:

*Conditional. Used when period is different than the header, such as cancel/rebill*  
*Generally, the DTMs are paired but it is acceptable to use one to represent the period.*

DTM~150~20000615  
DTM~151~20000714

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
DTM01	374	Date/Time Qualifier	M	ID	3/3	Mandatory
Description: Code specifying type of date or time, or both date and time						
		<u>Code</u>		<u>Name</u>		
		150		Service Period Start		
		151		Service Period End		
DTM02	373	Date	C	DT	8/8	Mandatory
Description: Date expressed as CCYYMMDD						

# SLN Subline Item Detail

Pos: 200	Max: 1
Detail - Optional	
Loop: SLN	Elements: 2

To specify product subline detail item data

## Syntax:

1. SLN04 P0405 -- If either SLN04 or SLN05 are present, then the others are required.
2. SLN07 C0706 -- If SLN07 is present, then SLN06 is required
3. SLN08 C0806 -- If SLN08 is present, then SLN06 is required
4. SLN09 P0910 -- If either SLN09 or SLN10 are present, then the others are required.
5. SLN11 P1112 -- If either SLN11 or SLN12 are present, then the others are required.
6. SLN13 P1314 -- If either SLN13 or SLN14 are present, then the others are required.
7. SLN15 P1516 -- If either SLN15 or SLN16 are present, then the others are required.
8. SLN17 P1718 -- If either SLN17 or SLN18 are present, then the others are required.
9. SLN19 P1920 -- If either SLN19 or SLN20 are present, then the others are required.
10. SLN21 P2122 -- If either SLN21 or SLN22 are present, then the others are required.
11. SLN23 P2324 -- If either SLN23 or SLN24 are present, then the others are required.
12. SLN25 P2526 -- If either SLN25 or SLN26 are present, then the others are required.
13. SLN27 P2728 -- If either SLN27 or SLN28 are present, then the others are required.

## Semantics:

1. SLN01 is the identifying number for the subline item.
2. SLN02 is the identifying number for the subline level. The subline level is analogous to the level code used in a bill of materials.
3. SLN03 is the configuration code indicating the relationship of the subline item to the baseline item.
4. SLN08 is a code indicating the relationship of the price or amount to the associated segment.

## Comments:

1. See the Data Element Dictionary for a complete list of IDs.
2. SLN01 is related to (but not necessarily equivalent to) the baseline item number. Example: 1.1 or 1A might be used as a subline number to relate to baseline number 1.
3. SLN09 through SLN28 provide for ten different product/service IDs for each item. For example: Case, Color, Drawing No., U.P.C. No., ISBN No., Model No., or SKU.

## Notes:

*Required if there are charges at a detailed level*

*SLN~1~~A*

## Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
SLN01	350	Assigned Identification	M	AN	1/20	Mandatory
		<b>Description:</b> Alphanumeric characters assigned for differentiation within a transaction set				
		<b>Notes:</b> <i>May be used as a loop counter for line item charges</i>				
SLN03	662	Relationship Code	M	ID	1/1	Mandatory
		<b>Description:</b> Code indicating the relationship between entities				
		<u>Code</u>		<u>Name</u>		
		A		Add		

**SAC**

# Service, Promotion, Allowance, or Charge Information (Account level charges)

Pos: 230	Max: 1
Detail - Optional	
Loop: SAC	Elements: 5

To request or identify a service, promotion, allowance, or charge; to specify the amount or percentage for the service, promotion, allowance, or charge

**Syntax:**

1. SAC02 R0203 -- At least one of SAC02 or SAC03 is required.
2. SAC03 P0304 -- If either SAC03 or SAC04 are present, then the others are required.
3. SAC06 P0607 -- If either SAC06 or SAC07 are present, then the others are required.
4. SAC09 P0910 -- If either SAC09 or SAC10 are present, then the others are required.
5. SAC11 C1110 -- If SAC11 is present, then SAC10 is required
6. SAC13 L130204 -- If SAC13 is present, then at least one of SAC02 or SAC04 is required.
7. SAC14 C1413 -- If SAC14 is present, then SAC13 is required
8. SAC16 C1615 -- If SAC16 is present, then SAC15 is required

**Semantics:**

1. If SAC01 is "A" or "C", then at least one of SAC05, SAC07, or SAC08 is required.
2. SAC05 is the total amount for the service, promotion, allowance, or charge.
3. If SAC05 is present with SAC07 or SAC08, then SAC05 takes precedence.
4. SAC08 is the allowance or charge rate per unit.
5. SAC10 and SAC11 is the quantity basis when the allowance or charge quantity is different from the purchase order or invoice quantity.
6. SAC10 and SAC11 used together indicate a quantity range, which could be a dollar amount, that is applicable to service, promotion, allowance, or charge.
7. SAC13 is used in conjunction with SAC02 or SAC04 to provide a specific reference number as identified by the code used.
8. SAC14 is used in conjunction with SAC13 to identify an option when there is more than one option of the promotion.
9. SAC16 is used to identify the language being used in SAC15.

**Comments:**

1. SAC04 may be used to uniquely identify the service, promotion, allowance, or charge. In addition, it may be used in conjunction to further the code in SAC02.
2. In some business applications, it is necessary to advise the trading partner of the actual dollar amount that a particular allowance, charge, or promotion was based on to reduce ambiguity. This amount is commonly referred to as "Dollar Basis Amount". It is represented in the SAC segment in SAC10 using the qualifier "DO" - Dollars in SAC09.

**Notes:**

*Required if there are charges at account level*

*SAC~C~EU~BAS001~1250~BASIC SVC CHG*

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SAC01	248	Allowance or Charge Indicator <b>Description:</b> Code which indicates an allowance or charge for the service specified	M	ID	1/1	Mandatory
		<u>Code</u> C				
		<u>Name</u> Charge				
SAC03	559	Agency Qualifier Code <b>Description:</b> Code identifying the agency assigning the code values	C	ID	2/2	Mandatory
		<u>Code</u>				
		<u>Name</u>				

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		EU Electric Utilities				
SAC04	1301	<b>Agency Service, Promotion, Allowance, or Charge Code</b> <b>Description:</b> Agency maintained code identifying the service, promotion, allowance, or charge <b>Notes:</b> <i>Required. Valid codes from UIG billing codes for SAC04 are below. Additional description is placed in SAC15</i> ADJ002 Adjustment BAS001 Basic Service Charge DSC009 Energy Assistance Discount HOC001 Service Establishment Fee RCS001 Reconnect Fee VCR001 Charitable Contribution OLD001 Security Lighting Charge/Credit MSC001 Miscellaneous Charge MSC007 Charge for Damaged Equipment SUR000 RUCO Regulatory Assessment MSC024 System Benefit Charge SUR000 ACC Regulatory Assessment FFR000 Xray Charge MSC000 Flat Rate Charge CRE011 Service Quality Promises RCS001 Cancellation of the Reconnect Fee HOC000 After Hour Establishment Fee HOC000 Direct Access Fee HOC000 Cancellation of Direct Access Fee TRS001 Charges Transferred FAC000 Line Extension Charge	C	AN	1/10	Mandatory
SAC05	610	<b>Amount</b> <b>Description:</b> Monetary amount <b>Notes:</b> <i>Dollar amounts may be positive or negative.</i>	O	N2	1/15	Mandatory
SAC13	230	<b>Reference Identification</b> <b>Description:</b> Reference information as defined for a particular Transaction Set or as specified by the Reference Identification Qualifier <b>Notes:</b> <i>Used for billing reason codes. Valid codes are:</i> CONS01 Estimated Read CONS02 Multiplier Error CONS03 Back Dated Turn On/off MET01 Meter Tampering MET02 Switched Meters MET03 Damaged Meter NM01 Non-metered Account	O	AN	1/30	Conditional

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<i>OK Backout and Rebill the Same</i>				
		<i>OTH01 Other</i>				
		<i>RAT01 Rate</i>				
		<i>TAX01 Tax</i>				
SAC15	352	<b>Description</b> <b>Description:</b> A free-form description to clarify the related data elements and their content <b>Notes:</b> <i>Description is required when SAC04 code is one of the following, or the suffix of the SAC04 code is 000.</i>	C	AN	1/80	Conditional

**TXI****Tax Information (Account/item level taxes)**

Pos: 237	Max: 10
Detail - Optional	
Loop: IT1	Elements: 6

To specify tax information

**Syntax:**

- R020306 -- At least one of TXI02, TXI03 or TXI06 is required.  
 P0405 -- If either TXI04 or TXI05 are present, then the others are required.  
 C0803 -- If TXI08 is present, then TXI03 is required

**Semantics:**

1. TXI02 is the monetary amount of the tax.
2. TXI03 is the tax percent expressed as a decimal.
3. TXI07 is a code indicating the relationship of the price or amount to the associated segment.

**Notes:***Required if taxes exist and are billed at Account/item level(Account)*

TXI~ZZ~4.55~CD~ABC~A~5  
 TXI~LS~8.10

**Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>																
TXI01	963	<b>Tax Type Code</b> Description: Code specifying the type of tax	M	ID	2/2	Mandatory																
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>AT</td><td>Assessment for Regulatory Assessments</td></tr><tr><td>CP</td><td>County/Parish Sales Tax</td></tr><tr><td>CS</td><td>City Sales Tax</td></tr><tr><td>FR</td><td>FranchiseTax</td></tr><tr><td>LS</td><td>State and Local Sales Tax</td></tr><tr><td>ST</td><td>State Sales Tax</td></tr><tr><td>ZZ</td><td>Mutually Defined</td></tr></table>	<u>Code</u>	<u>Name</u>	AT	Assessment for Regulatory Assessments	CP	County/Parish Sales Tax	CS	City Sales Tax	FR	FranchiseTax	LS	State and Local Sales Tax	ST	State Sales Tax	ZZ	Mutually Defined				
<u>Code</u>	<u>Name</u>																					
AT	Assessment for Regulatory Assessments																					
CP	County/Parish Sales Tax																					
CS	City Sales Tax																					
FR	FranchiseTax																					
LS	State and Local Sales Tax																					
ST	State Sales Tax																					
ZZ	Mutually Defined																					
TXI02	782	<b>Monetary Amount</b> Description: Monetary amount	C	R	1/18	Mandatory																
TXI04	955	<b>Tax Jurisdiction Code Qualifier</b> Description: Code identifying the source of the data used in tax jurisdiction code	C	ID	2/2	Conditional																
		Notes: Required if TXI01 = ZZ																				
		<table><tr><th><u>Code</u></th><th><u>Name</u></th></tr><tr><td>CD</td><td>Customer defined</td></tr></table>	<u>Code</u>	<u>Name</u>	CD	Customer defined																
<u>Code</u>	<u>Name</u>																					
CD	Customer defined																					
TXI05	956	<b>Tax Jurisdiction Code</b> Description: Code identifying the taxing jurisdiction	C	AN	1/10	Conditional																
		Notes: Required if TXI01 = ZZ																				
TXI07	662	<b>Relationship Code</b> Description: Code indicating the relationship between entities	O	ID	1/1	Optional																

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>		<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
		<u>Code</u>	<u>Name</u>				
		A	Add				

**Notes:** *The amount in TX102 is included when summing the invoice total*



TDS

Total Monetary Value Summary

Pos: 010	Max: 1
Summary - Mandatory	
Loop: N/A	Elements: 1

To specify the total invoice discounts and amounts

Semantics:

- 1. TDS01 is the total amount of invoice (including charges, less allowances) before terms discount (if discount is applicable).
- 2. TDS02 indicates the amount upon which the terms discount amount is calculated.
- 3. TDS03 is the amount of invoice due if paid by terms discount due date (total invoice or installment amount less cash discount).
- 4. TDS04 indicates the total amount of terms discount.

Comments:

- 1. TDS02 is required if the dollar value subject to discount is not equal to the dollar value of TDS01.

Notes:

Required

TDS-53275

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
TDS01	610	Amount	M	N2	1/15	Mandatory
		Description: Monetary amount				
		Notes: Total dollar amount of non-billing party's invoice				

CTT

Transaction Totals

Pos: 070	Max: 1
Summary - Optional	
Loop: N/A	Elements: 1

To transmit a hash total for a specific element in the transaction set

Syntax:

- 1. CTT03 P0304 -- If either CTT03 or CTT04 are present, then the others are required.
- 2. CTT05 P0506 -- If either CTT05 or CTT06 are present, then the others are required.

Comments:

- 1. This segment is intended to provide hash totals to validate transaction completeness and correctness.

Notes:

Recommended

CTT~3

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage
CTT01	354	Number of Line Items	M	N0	1/6	Mandatory
		Description: Total number of line items in the transaction set				
		Notes: Number of IT1 segments in detail section				

**SE****Transaction Set Trailer**

<b>Pos: 080</b>	<b>Max: 1</b>
<b>Summary - Mandatory</b>	
<b>Loop: N/A</b>	<b>Elements: 2</b>

To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

**Comments:**

1. SE is the last segment of each transaction set.

**Notes:***Required**SE~27~00052***Element Summary:**

<u>Ref</u>	<u>Id</u>	<u>Element Name</u>	<u>Req</u>	<u>Type</u>	<u>Min/Max</u>	<u>Usage</u>
SE01	96	<b>Number of Included Segments</b> <b>Description:</b> Total number of segments included in a transaction set including ST and SE segments	M	N0	1/10	Mandatory
SE02	329	<b>Transaction Set Control Number</b> <b>Description:</b> Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set	M	AN	4/9	Mandatory

